

Abstract of the Disclosure

A method for non-contact measurement of a dimension and/or an electrical property in an electrically conducting object to be measured by using electromagnetic induction. An electromagnetic field is brought to penetrate through the object to be measured. A transmitter coil is placed on one side of the object to be measured. A receiver coil is placed on the other side of the object to be measured. A magnetic field is generated in the transmitter coil. A sudden change is generated in the magnetic field generated in the transmitter coil from one level to another. The voltage induced in the receiver coil is detected. The period of time that elapses from the time of the change of the magnetic field in the transmitter coil up to the time when a voltage starts to be induced in the receiver coil is determined. The magnitude of the induced voltage is determined. The thickness and/or electrical conductivity of the object to be measured is calculated.